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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,528	11/24/2003	Danny E. Scott	1684-3739.2US (484-12186-	5325
24247	7590	03/07/2005	EXAMINER	
TRASK BRITT P.O. BOX 2550 SALT LAKE CITY, UT 84110			ASHLEY, BOYER DOLINGER	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/721,528

Applicant(s)

SCOTT, DANNY E.

Examiner

Boyer D. Ashley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/3/05; 11/24/03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Although the examiner does not necessarily agree with applicant's arguments regarding the restriction requirement, the restriction requirement is henceforth withdrawn.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-8 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6,655,234.

Although the conflicting claims are not identical, they are not patentably distinct from each other because they differ only in claim terminology but encompass the same subject matter, that is, the claims 1-16 of U.S. Patent 6,655,234, anticipate the claim language of the instant application.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, line 1, the expression "a substrate" appears to be a double inclusion of the substrate set forth in claim 1.

In claim 9, line 1, the expression "a superabrasive table" appears to be a double inclusion of the superabrasive table set forth in claim 1.

In claim 13, line 1, the expression "a substrate" appears to be a double inclusion of the substrate set forth in claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 5, 9, 13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tibbitts, U.S. Patent 5,316,095, in view of UK Patent GB 2,236,699, hereinafter, GB '699, and Quinlan et al., U.S. Patent 4,743,481.

Tibbitts discloses the invention substantially as claimed, including the steps of:
forming a substrate of hard material (10/16) with at least one internal cavity

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(22/46/70/68/42'/70') and an attachment surface (the rear of 34 or the rear of 30); attaching a superabrasive table (30) to the attachment surface.

Tibbitts discloses the invention substantially as claimed except for the step of filling the internal cavity with a substantially non-compressible filler material and removing the filler material from the internal cavity after the step of forming the super abrasive table on the attachment surface. However, GB '699 discloses that it is old and well known in the art to introduce filler into hollow cavities prior to further processing for the purpose of preventing contaminants from entering the hollow cavities such that the manufacturing process is enhanced. Further GB '699 further discloses the step of removing the filler after processing. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a filler in the internal cavities of the substrate of Tibbitts prior to attaching the super abrasive table on the attachment surface in order to prevent contaminants from entering the internal cavities during the step of attaching the table.

In the alternative, even if it argued that filler material of the modified method of Tibbitts is not noncompressible, Quinlan et al. discloses that it is old and well known in the art to use incompressible filler material for the purpose of supporting performs that are to be subjected high pressures and temperatures as well as removal the filler material after the high pressure/temperature process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use an noncompressible filler material with modified method of Tibbitts in order to prevent the filler material from being effected by the high pressure/temperature process.

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As to claim 9, the modified device of Tibbitts discloses as shown in Figure 3 (column 3, lines 29-40, column 5, lines 45-56) a bonding surface (the rear of table 30 attached to substrate 34) with at least one channel formed within the bonding surface (42) with at least one inlet and outlet as shown. Alternatively, the bonding surface could be considered as the rear of substrate 34 with at least one channel (46) formed within the bonding surface with at least one inlet (the rear) and outlet (the front) proximate (proximate defined as close or near) the outer periphery.

As to claims 13, 17, and 21, see Figure 3-3A and the comments above regarding claim 9, it is shown both bit (36), substrate (34), and table (30) all with internal passages, that communicate with each other, having inlets and outlets, wherein the outlets are proximate (near) the outer periphery of the substrate and tables.

8. Claims 2, 6, 10, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tibbitts, in view of GB '699 and Quinlan et al. as applied to claim 1 above and further in view of Heine et al., U.S. Patent 4,802,525.

The modified device of Tibbitts discloses the invention substantially as claimed except for removing the filler material by mechanical means; however, Heine et al. discloses that it is old and well known in the art to use mechanical means with water for the purpose of facilitating the separating of parts after a casting process. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a mechanical means in order to remove the filler material from the internal cavity of the modified device of Tibbitts, as taught by Heine et al.

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9. Claims 3-4, 7-8, 11-12, 15-16, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tibbitts, in view of GB '699 and Quinlan et al. as applied to claim 1 above and further in view of Alden, U.S. Patent 1,554,697.

The modified device of Tibbitts discloses the invention substantially as claimed except for the filler material comprising sodium chloride or salt; however, Alden discloses that it is old and well known in the art to use salt as dissolvable core in the manufacture of hollow articles for the purpose of readily detaching the core from the finished product. Therefore, it would have been obvious to use salt as the filler material in the modified device of Tibbitts in order to facilitate the removal of the filler material.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

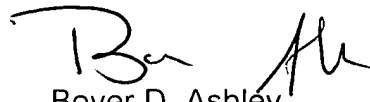
11. The prior art references cited but not relied upon were cited to shown similar devices in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boyer D. Ashley whose telephone number is 571-272-4502. The examiner can normally be reached on Monday-Thursday 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Boyer D. Ashley
Primary Examiner
Art Unit 3724

BDA
March 1, 2005